

Serial No. 10/734,660  
Response to Office action dated March 23, 2005

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of the Claims:**

1. (currently amended) ~~A~~ An aqueous solvent-system photothermographic material comprising, on a support, an image forming layer containing at least a photosensitive silver halide, a non-photosensitive organic silver salt, a reducing agent and a binder, and a non-photosensitive outermost layer at a surface side of the support at which the image forming layer is provided, wherein:

the non-photosensitive organic silver salt contains 90% by mole or more of silver behenate; ~~and~~

a binder in the outermost layer contains 50% by weight or more of a hydrophobic polymer latex; and

the outermost layer contains a water-soluble gelling agent.

2. (original) The photothermographic material according to claim 1, further comprising at least one development accelerator at the surface side at which the image forming layer is provided.

3. (currently amended) ~~A~~ An aqueous solvent-system photothermographic material comprising, on a support, an image forming layer containing at least a photosensitive silver halide, a non-photosensitive organic silver salt, a reducing agent and

Serial No. 10/734,660

Response to Office action dated March 23, 2005

a binder, and a non-photosensitive outermost layer at a surface side of the support at which the image forming layer is provided, wherein:

the outermost layer contains a polymer latex; and

a layer adjacent to the outermost layer contains a ~~binder~~ water-soluble gelling agent which can lose fluidity upon a decrease in temperature.

4. (original) The photothermographic material according to claim 3, wherein the polymer latex has a glass transition temperature  $T_g$  in the range of from  $-20^{\circ}\text{C}$  to  $70^{\circ}\text{C}$ .

5. (original) The photothermographic material according to claim 3, wherein the polymer latex is at least one selected from the group consisting of an acrylic polymer latex, a urethane polymer latex and a styrene-butadiene copolymer latex.

6. (original) The photothermographic material according to claim 3, wherein the layer adjacent to the outermost layer contains a water-soluble polymer derived from an animal protein.

7. (original) The photothermographic material according to claim 6, wherein the water-soluble polymer derived from an animal protein is gelatin.

8. (cancelled)

9. (currently amended) The photothermographic material according to claim 1 8, wherein the gelling agent is at least one selected from the group consisting of agar,  $\kappa$ -carrageenan,  $\iota$ -carrageenan, alginic acid, alginate, agarose, furcellan, jellan gum, glucono- $\delta$ -lactone, azotobactor vinelandii gum, xanthan gum, pectin, guar gum, locust bean gum, tara gum, cassia gum, glucomannan, tragacanth gum, karaya gum, pullulan,

Serial No. 10/734,660  
Response to Office action dated March 23, 2005

gum arabic, arabinogalactan, dextran, sodium carboxymethyl cellulose, methyl cellulose, cyalume sheet gum, starch, chitin, chitosan, and curdlan.

10. (currently amended) The photothermographic material according to claim 1 8, further comprising a gelation accelerator.

11. (original) The photothermographic material according to claim 10, wherein the gelation accelerator is contained in a layer that is not in direct contact with the layer containing the gelling agent.

12. (original) The photothermographic material according to claim 3, wherein the non-photosensitive layer and image forming layer are formed by simultaneous multilayer application.

13. (currently amended) A An aqueous solvent-system photothermographic material comprising, on a support, an image forming layer containing at least a photosensitive silver halide, a non-photosensitive organic silver salt, a reducing agent and a binder, and a non-photosensitive outermost layer at a surface side of the support at which the image forming layer is provided, wherein:

the outermost layer contains a polymer latex and a water-soluble gelling agent;  
and

a coating solution for forming the outermost layer can lose fluidity upon a decrease in temperature.

14. (cancelled)

Serial No. 10/734,660

Response to Office action dated March 23, 2005

15. (original) The photothermographic material according to claim 13, wherein the gelling agent is at least one selected from the group consisting of agar,  $\kappa$ -carrageenan,  $\iota$ -carrageenan, alginic acid, alginate, agarose, furcellan, jellan gum, glucono- $\delta$ -lactone, azotobactor vinelandii gum, xanthan gum, pectin, guar gum, locust bean gum, tara gum, cassia gum, glucomannan, tragacanth gum, karaya gum, pullulan, gum arabic, arabinogalactan, dextran, sodium carboxymethyl cellulose, methyl cellulose, cyalume sheet gum, starch, chitin, chitosan, and curdlan.

16. (currently amended) The photothermographic material according to claim 13 14, wherein the gelling agent is  $\kappa$ -carrageenan.

17. (currently amended) The photothermographic material according to claim 13 14, further comprising a gelation accelerator.

18. (original) The photothermographic material according to claim 17, wherein the gelation accelerator is contained in any one of layers provided between the outermost layer and the support at the surface side of the support at which the outermost layer is provided.

19. (original) The photothermographic material according to claim 3, wherein any one of layers at the surface side of the support at which the outermost layer is provided contains a fluorocarbon compound having a fluoroalkyl group with at least 2 carbon atoms and no more than 12 fluorine atoms.

20. (currently amended) The photothermographic material according to claim 19, wherein the fluorocarbon compound has a fluoroalkyl group represented by the following ~~general~~ formula (FW):

Serial No. 10/734,660  
Response to Office action dated March 23, 2005

**-Rc-Re-W General formula (FW)**

wherein, Rc represents an alkylene group with 1 to 4 carbon atoms, Re represents a perfluoroalkylene group with 2 to 6 carbon atoms, and W represents any one of a hydrogen atom, a fluorine atom and an alkyl group.

21. (original) The photothermographic material according to claim 3, wherein at least one of the outermost layer and the layer adjacent to the outermost layer contains matting agent particles dispersed in advance with a water-soluble polymer that is not derived from an animal protein.

22. (new) The photothermographic material according to claim 1, wherein the water-soluble gelling agent is a water-soluble polysaccharide.

23. (new) The photothermographic material according to claim 3, wherein the water-soluble gelling agent is a water-soluble polysaccharide.

24. (new) The photothermographic material according to claim 13, wherein the water-soluble gelling agent is a water-soluble polysaccharide.